## DETAILED DESCRIPTION

In particular, it has been found that a chewable mineral supplement having a penetration hardness of 2 mm or more, and a final water content of about 2 to about 4.5% by weight is produced from an admixture of about 40 to about 85% by weight of a nougat candy base having a sugar to corn syrup ratio from about 1:1 to about 2:1 wherein said corn syrup has a dextrose equivalence of about 35 to about 55; an edible polyol in an amount of from about 1.5 to about 6.0% by weight; a mineral compound in an amount up to about 40% by weight; and optimally a graining compound in an amount from about 0.5 to about 4% by weight.

While the invention is not to be limited to theoretical considerations, it is believed that incorporation of an edible polyol such as glycerin into the soft nougat candy base provides an unexpected coating action. This coating action permits the otherwise dry, chalky, gritty particulate mineral compounds to be incorporated into the candy base such that each particle becomes coated by the candy base. It is believed that this candy base coating prevents the chalky, gritty taste and mouthfeel generally associated with chewable mineral supplements and antacids.

Glycerin is known in the confectionery art as a humectant and conditioner. The humectant qualities of glycerin are used to prevent confectionery products from drying out during low humidity conditions. Surprisingly, a very small change in glycerin content has a large effect on the Equilibrium Relative Humidity (ERH) of the inventive product. The ERH is the relative humidity at which the product will neither gain nor lose water to the atmosphere. When the glycerin content of the inventive product is 3.6% by weight, the ERH is 46%. When the glycerin content is 4.1%, the ERH is 38%. This relatively low ERH enables the final product to retain its soft texture.

The incorporation of large quantities of powders into a nougat base causes rapid product graining. This graining causes processing difficulties and a short, granular product chew. Incorporation of glycerin into the nougat base unexpectedly permits large quantities of powder to be admixed into the nougat base, without causing graining or a granular chew. The addition of glycerin further, unexpectedly eliminates processing difficulties.

The nougat candy base of the present invention comprises a syrup component and a whipped component. The syru component comprises by weight of the chewable mineral supplement, corn syrup in an amount of about 13 to about 41% having a dextrose equivalence from about 35 to about 55, and sugar in an amount of about 15 to 53%. Corn syrup having a dextrose equivalence less than 35 will cause the nougat base to become too hard, dry and less pliable. A dextrose equivalence greater than 55 will cause the nougat base to become discolored, sticky and difficult to process.

In a preferred embodiment, the syrup component comprises by weight of the chewable mineral supplement from about 15 to about 30% corn syrup having a dextrose equivalence from about 35 to about 55, and sugar in an amount from about 20 to about 40%.

One important feature of the invention is the weight ratio of sugar to corn syrup solids. This ratio may be about 1:1 to about 2:1, preferably about 1.2:1 to about 2:1 and most preferably about 1.3:1 to about 1.7:1. A sugar to corn syrup ratio of less than 1:1 produces a final product having texture that is too soft and sticky which results in sticky mouthfeel. A sugar to corn syrup ratio greater than 2:1 produces a grainy textured product which is difficult to chew.

In a more preferred embodiment, the syrup component comprises by weight of the chewable mineral supplement from about 18 to about 21% corn syrup having a dextrose equivalence from about 35 to about 55, and sugar in an amount of about 27 to about 31%.

The whipped component comprises by weight of the chewable mineral supplement, at least one whipping agent present in an amount of from about 0.1 to about 1%. The whipping agent functions as a means of holding air introduced into the product to produce a uniform dispersity of air cells within the confection leading to a lower specific weight and considerable modification to the texture.

Suitable whipping agents may include egg albumen, gelatin, milk proteins or other milk derived compounds such as whey, casein derivatives, vegetable proteins such as soy derived compounds, modified milk proteins, and mixtures thereof.

In a preferred embodiment, the whipped component comprises, by weight of the chewable mineral supplement at least one whipping agent present in an amount of from about 0.2 to about 0.6% and;most preferably 0.3 to about 0.4% and other conventional components such as sugar, sorbitol, starch, water, glucose syrup and so forth.

The edible polyol may be selected from the group consisting of propylene glycol, glycerin, polyethylene glycol and mixtures thereof. Preferably, the edible polyol comprises glycerin.

In a preferred embodiment, the edible polyol is present in an amount from about 2 to about 5% by weight of the chewable mineral supplement and most preferably in an amount from about 2.5 to about 4.5% by weight. A polyol content of less than 2% results in a chalky tasting, dry product. Polyol content greater than 5% results in a sticky, difficult to process product having unpleasant sticky chew characteristics.

The mineral compound may be selected from a wide range of compounds that provide a source of absorbable minerals when ingested. Suitable compounds are preferably organic or inorganic salts that render the compounds absorbable herein. Exemplary salts may be selected from the group consisting of salts of lithium, sodium, potassium, magnesium, calcium, phosphorous, iron, zinc and mixtures thereof.

One particularly preferred mineral compound is calcium which calcium eompound may be selected from the group consisting of calcium gluconate, calcium chloride, calcium lactate, calcium phosphate, monobasic calcium phosphate, dibasic calcium phosphate, tribasic calcium phosphate, calcium carbonate, calcium tartrate, calcium glycerophosphate, calcium levulinate, calcium hypophosphate, calcium sulfate, calcium gluceptate, calcium chelates, calcium amino acid chelate, ground limestone, ground oyster shells and mixtures thereof. Preferably the calcium compound comprises calcium carbonate.

Compounds used to provide a mineral supplement of lithium include organic and inorganic salts wherein the anion is chloride, carbonate, citrate, sulfate, bromide and mixtures thereof.

Compounds useful in providing a mineral supplement of zinc include inorganic and organic salts wherein the anionic portion of the salt is carbonate, chloride, citrate, and mixtures thereof.